National Transportation Plan Overview

Presented to:
Transportation External Coordination Working Group

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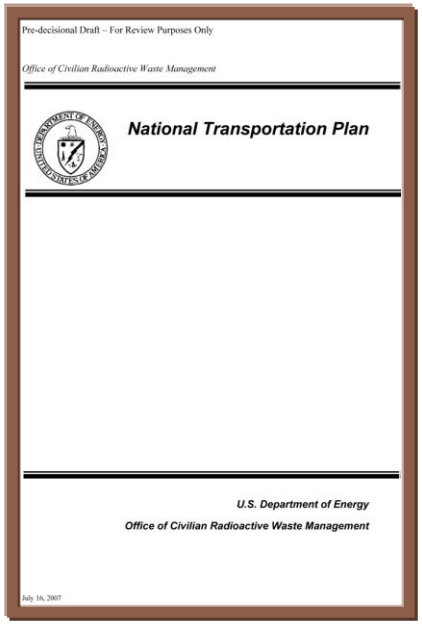
Introduction

- The Office of Logistics Management (OLM) has prepared a draft comprehensive National Transportation Plan (NTP)
- Developing the NTP is one of four strategic OCRWM program objectives
- Elements of the plan include
  - Requirements
  - Infrastructure development
  - Stakeholder involvement
  - Operations planning
- OLM has reached out to state, local, and tribal government and industry to solicit their input
- A formal comment and response document will be issued when the plan is finalized

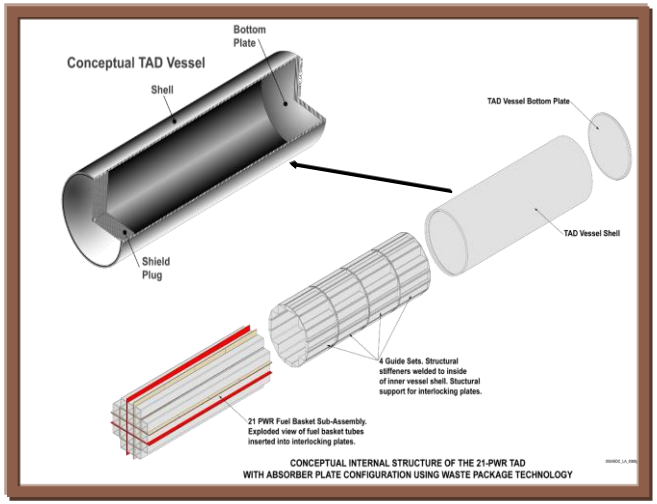


Purpose of Plan

- **Plan outlines the strategy and process for developing a transport system to support operation of the Yucca Mountain repository in 2017**
  - **Spent nuclear fuel (SNF) and high-level radioactive waste (HLW) must be transported safely and securely from origin sites**
  - **Lays out a vision for the transportation system when it is operational**
- **Gives status of current development efforts**
- **Outlines roles of participants and opportunities for stakeholder input**
- **Reviews issues/decisions that have shaped the plan**
  - **Presents outstanding issues and resolution process**

Situation Assessment

- Two OLM projects will develop the capital assets of the transportation system guided by Department of Energy (DOE) orders
  - National Transportation – Shipping casks and special rail cars
  - Nevada Rail
- Builds on past planning efforts and recognizes commercial and government experience in safely shipping spent nuclear fuel
- Identifies policies and requirements that will govern the transportation system
  - Sections 180 and 137 of the Nuclear Waste Policy Act, as amended
  - Meet or exceed Nuclear Regulatory Commission and Department of Transportation regulations
  - Industry standards
- Presents key milestones and dates



Situation Assessment
(continued)

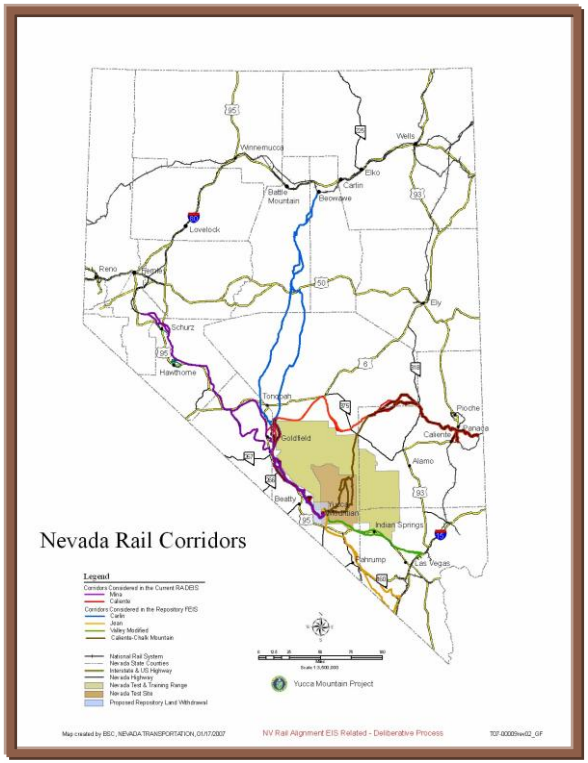
- **Documents transportation issues that have been resolved**
  - **Rail shipments will be in dedicated trains**
  - **Commercial Vehicle Safety Alliance Level VI Inspection Standard will be used for truck shipments**
- **Assumptions include**
  - **Funds will be available**
  - **Railroad will be fully operational in 2014**
  - **Planning grants supporting 180(c) training will be issued four years in advance of shipments—2013**
- **Wastes for transport include 63,000 metric tons of commercial spent fuel and 7,000 metric tons of DOE SNF and HLW**
- **A transportation, aging, and disposal (TAD) canister-based system will be utilized**

Situation Assessment
(continued)

- **Standard Contract with utilities establishes the basis under which DOE will accept commercial SNF**
- **Ongoing benchmarking will identify and incorporate "best practices" for transportation logistics enterprises**
- **Constraints outside the control of OLM include**
  - **Congressional direction**
  - **Court decisions**
  - **Market conditions**
- **OLM will address project risks that can be influenced and mitigated**

Development of Transportation System

- **Elements of the Nevada rail line include**
  - **Equipment yard**
  - **Sidings**
  - **Train control center**
  - **Maintenance-of-way facilities**
- **Industry is being engaged to inform OLM on contracting for the final design, construction and operations of the rail line**
  - **Via a Request for Information issued in June 2007 potential vendors were asked to provide comments on approaches to design, construction and operation of a railroad in Nevada**



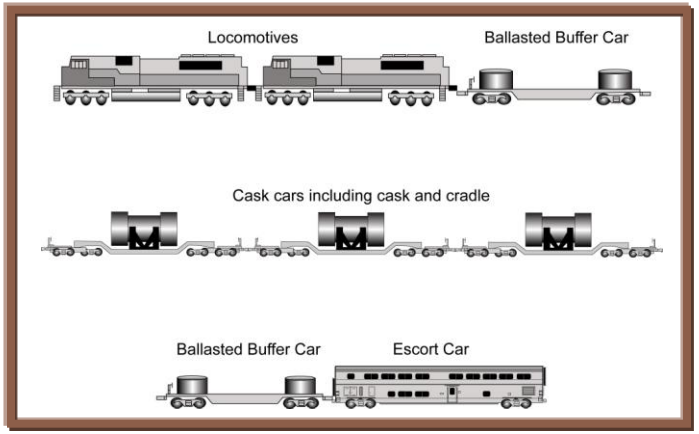
- **OLM will request a Federal Railroad Administration safety inspection of the rail line prior to commissioning and putting it into service**

Development of Transportation System
(continued)

- **National Transportation Project will acquire**
  - **Shipping casks for truck and rail**
  - **Special rail cars**
  - **Maintenance facilities for casks, rolling stock, and transfer and maintenance equipment**
- **Efforts to acquire TAD canisters are underway**
  - **Request for proposal for the final design, NRC certification, and demonstration casks issued in July 2007**
  - **Receipt is planned for 2016**
- **DOE will procure casks needed for start-up**
  - **Cask fleet acquisition will transition to the private sector under operational contracts**
  - **Estimates show that 100 to 120 casks will be needed to ship 3,000 metric tons per year**

Development of Transportation System
(continued)

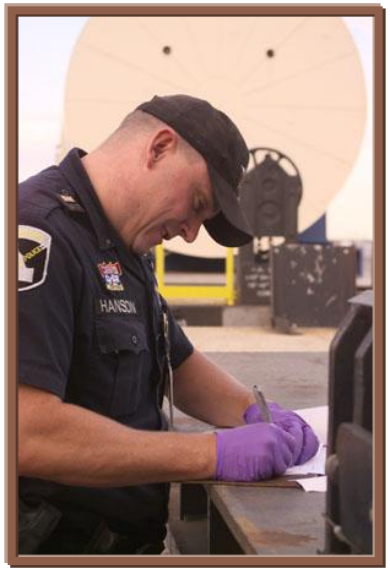
- **Rolling stock will be designed to and tested to meet Association of American Railroads Standard-2043**
  - **Estimates call for**
    - **120 cask cars**
    - **60 buffer cars**
    - **15 escort cars**



- **OLM plans to contract for logistics services**
  - **Trucks and trailers would be included in service contracts**
- **The operations delivery commitment schedule with utilities will be finalized 63 months prior to the shipment**

Development of Transportation System
(continued)

- Exercises, practice runs with empty casks, and readiness reviews will verify system readiness
- Two years prior to a shipment, site campaign plans will formalize agreements on specific roles and responsibilities of shipping site, states, tribes, commercial carriers, DOE and other federal agencies
- Shipments will be inspected prior to departure by federal and state inspectors
- En-route inspections will follow
  - FRA Safety Compliance Oversight Plan and state rail safety programs
  - Commercial Vehicle Safety Alliance Level VI Standard
- Prior studies evaluating utility site capabilities and their transportation infrastructure will be updated

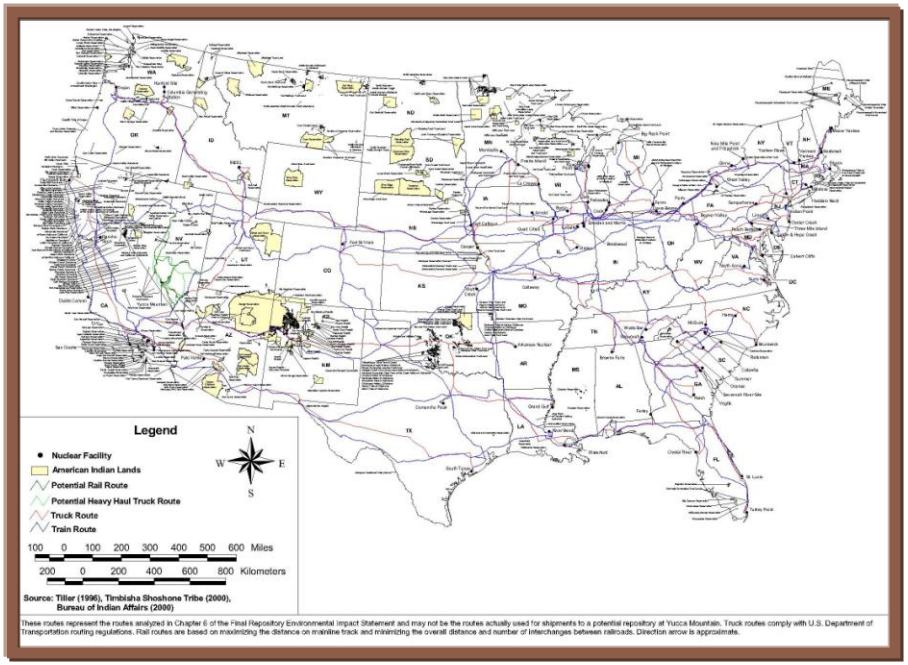


Development of Transportation System
(continued)

- **OCRWM will track shipments in transit integrating**
  - **Geographic location capabilities**
  - **Onboard monitoring**
  - **Two-way communications**
- **Stakeholder interactions will continue through operations**
  - **Industry**
  - **Tribes**
  - **State Regional Groups**
  - **National organizations**
  - **Transportation External Coordination Working Group (TEC)**
  - **Other federal agencies**

Key Logistics Development Initiatives

- Route identification process has begun to identify criteria
- Identifying routes is a prerequisite for
  - State, tribal and local governments' planning and training activities
  - DOE campaign plans and contractual requirements
- Preliminary suite of routes will be identified in 2009



180(c) Implementation

- DOE has responsibility to provide funding and assistance to states, tribes and local officials for OCRWM shipments
- 180(c) program will be implemented in three stages
  - Develop the proposed grant policy and implementation steps
    - Conduct a limited pilot
  - Establish grant process to award funds in 2013
    - Initial assessment and planning grant
    - Training grant
  - Full operations involving eligible states and tribes
    - Training and exercises
    - Technical assistance

Other Plan Elements

- Outstanding issues and their resolution method
- OLM organization
- Responsibilities of OLM and its planning partners
  - Transportation industry
  - States and tribes
  - Local governments
  - Utilities
  - Transportation industry
  - Other DOE programs and federal agencies
- Baselines
- Milestone schedule
- Cost basis/budget

Next Steps

- **Comments from TEC meeting will be reviewed next week**
- **DOE will conduct internal review to refine and amend plan**
- **An amended draft will be published on OCRWM website by August 6th**
- **Comments due September 7th**

How to Comment

- **We welcome your comments**
  - **OCRWM website**
    - **http://www.ocrwm.doe.gov/**
    - **Click on Transporting Nuclear Waste**
  - **Email**
    - **Corinne.Macaluso@rw.doe.gov**
    - **Jennifer.Patric@rw.doe.gov**